Summer Institute on Teaching Mathematics and Science in English Cyprus, June 2006 Dorit Kaufman Stony Brook University Stony Brook, NY 11794-4376

Effective Teaching and Pedagogical Approaches Developing the Curricular Unit – Collaborative Dynamics

A: Grouping by discipline and grade level.

B: Groups determine the topic and develop the unit using topics I-IV.

C: Groups' reflections on the collaborative process:

Discuss the advantages and/or disadvantages of working collaboratively What would you have changed to improve the group dynamics Give an example of one new thing that you learned through this process

D: Group presentations

Curricular Module Development

Adapted from Teacher Work Sample Renaissance Partnership for Improving Teacher Quality http://fp.uni.edu/itq/ProjectOverview/Index.htm

| I. Contextual Factors – The Setting for Learning | Analyze the learning context – students, school, and community and understand its impact on the formulation of standards-based learning goals, assessment plan, design for instruction, and student learning. |
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| II. Learning Goals | Design learning goals that are aligned with state, professional, and national standards and grounded in research in the discipline and its pedagogy to formulate a plan to engage all students in meaningful learning using verbal, non verbal, and media communications strategies to foster active inquiry, collaboration, and s interaction. |
| III. Assessment Plan | Apply multiple formal and informal modes of assessment that are aligned with learning goals to assess students before, during, and after instruction to monitor learner progress, and inform, modify, and improve instruction in accordance with individual students' needs. |
| IV. Design for Instruction | Apply multiple instructional strategies that are aligned with the learning goals to creatively develop critical thinking, cognitive, and performance skills, and intellectual curiosity for all learners. |
| V. Analysis of Student Learning | Use assessment data to analyze the impact of instruction on student learning and formulate plans for adjusting learning goals, assessment, and instruction. |
| VI. Reflection & Self-Evaluation | Engage in reflective practice to continually evaluate the impact of teaching on student learning and implications for professional development and improved instruction. |

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